

Hydrogen Production MethodAbstract

A method of producing hydrogen in which oxygen is separated from an oxygen containing stream to produce an oxygen permeate which is mixed with a hydrocarbon containing stream and steam. Steam, one or more hydrocarbons and permeated oxygen is reacted to produce a synthesis gas. Hydrogen is separated from the synthesis gas by a hydrogen transport membrane to produce a hydrogen permeate which after cooling is used to form a hydrogen product stream. The hydrogen-depleted crude synthesis gas is then combusted to heat the incoming oxygen containing feed.

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